

Work Order ID 103590

103590

Page 1

June-24-13 1:58:55 PM

Item ID: D3916-5

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Light Rib

Stop

NS2

Start Date: 6/27/13 Start Qty: 6.00

6

Cust Item ID:

Required Date: 7/05/13 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: MLT

Date: 13-06-26

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3916 | A |

100

0.00

100

Large Fab

Memo

0.00

(6)

2013-06-26

Large Fab

1- Cut tube 50"

2- Bend tube with manuel pipe bender as per DT9566

*** Make line at 9.00" and use jig for other line***

3- Trim access tube material to finish size as per dwg D3916

110

QC6- Inspect dimensions to drawing

0.00

(6x)

2013-06-26

110

QC

Quality Control

Memo

0.00

120

Identify as per dwg & Stock Location: _____

0.00

(6x)

2013-06-26

120

Packaging

Packaging

Memo

0.00

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

| | | | | | | | |
|-------------------|---|--|------------------------------------|--|--------------------------------------|--|--|
| Work Order: _____ | DISPOSITION | AGAINST DEPARTMENT/PROCESS | | | | | |
| Part No. _____ | Rework <input type="checkbox"/> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | |
| NCR No. _____ | Scrap <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coor. <input type="checkbox"/> | Quality <input type="checkbox"/> | | |
| | Use-as-is <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | |
| | Suspected Unapproved <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | General | General | General |
|---|---|--|---|---|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Folio/Program | <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Pressure/Forced |
| <input type="checkbox"/> Centre Not Concentric | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Grain | <input type="checkbox"/> Over/Under tolerance | <input type="checkbox"/> Set-up |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damage/Defect | <input type="checkbox"/> Hardware | <input type="checkbox"/> Part Incorrect | <input type="checkbox"/> Temperature/Cure |
| <input type="checkbox"/> Crimp/Kink/Ripple/Wave | <input type="checkbox"/> Burrs | <input type="checkbox"/> Inspection Incomplete/Unqualified | <input type="checkbox"/> Part Lost/Missing | <input type="checkbox"/> Weld |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Instructions Incomplete/Unclear | <input type="checkbox"/> Part Moved | <input type="checkbox"/> Wrong Stock Pulled |
| <input type="checkbox"/> Crushing | <input type="checkbox"/> Countersink | <input type="checkbox"/> Misaligned/off center | <input type="checkbox"/> Positioned Wrong | <input type="checkbox"/> Other |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Mislabeled | <input type="checkbox"/> Power Loss/Surge | |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Drawing | <input type="checkbox"/> Misread | | |
| <input type="checkbox"/> Marks/Chatter | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Off-set | | |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Calibration | | |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Out of Sequence | | |

Work Order ID 103590

June-24-13 1:58:55 PM

103590

Page 2

Item ID: D3916-5

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Light Rib

Stop

NS2

Start Date: 6/27/13 Start Qty: 6.00

6

Cust Item ID:

Required Date: 7/05/13 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Quality Control

Memo

0.00

13/9/98

el 13091

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

| | | | | | | | | | | |
|--|-------------|--------------------------|---------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION | | | | AGAINST DEPARTMENT/PROCESS | | | | | |
| | Rework | <input type="checkbox"/> | Skid-tube | <input type="checkbox"/> | Crosstube | <input type="checkbox"/> | Water Jet | <input type="checkbox"/> | Engineering | <input type="checkbox"/> |
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| Suspected Unapproved | | | | Large Fab | <input type="checkbox"/> | Composite | <input type="checkbox"/> | Supplier | <input type="checkbox"/> | |

| Root Cause | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | | | | | | | |
|--------------------------|--------------------------|----------------------|--------------------------|-----------------------------------|--------------------------|----------------------|--------------------------|--------------------|
| Bending | <input type="checkbox"/> | Bend | <input type="checkbox"/> | Folio/Program | <input type="checkbox"/> | Outside Dimensions | <input type="checkbox"/> | Pressure/Forced |
| Centre Not Concentric | <input type="checkbox"/> | BOM/Route | <input type="checkbox"/> | Grain | <input type="checkbox"/> | Over/Under tolerance | <input type="checkbox"/> | Set-up |
| Cracks | <input type="checkbox"/> | Broken/Damage/Defect | <input type="checkbox"/> | Hardware | <input type="checkbox"/> | Part Incorrect | <input type="checkbox"/> | Temperature/Cure |
| Crimp/Kink/Ripple/Wave | <input type="checkbox"/> | Burrs | <input type="checkbox"/> | Inspection Incomplete/Unqualified | <input type="checkbox"/> | Part Lost/Missing | <input type="checkbox"/> | Weld |
| Cuffs | <input type="checkbox"/> | Contamination | <input type="checkbox"/> | Instructions Incomplete/Unclear | <input type="checkbox"/> | Part Moved | <input type="checkbox"/> | Wrong Stock Pulled |
| Crushing | <input type="checkbox"/> | Countersink | <input type="checkbox"/> | Misaligned/off center | <input type="checkbox"/> | Positioned Wrong | <input type="checkbox"/> | |
| Heat Treat | <input type="checkbox"/> | Cut Too Short | <input type="checkbox"/> | Mislabeled | <input type="checkbox"/> | Power Loss/Surge | <input type="checkbox"/> | Other |
| Inspection Strip in Tube | <input type="checkbox"/> | Drawing | <input type="checkbox"/> | Misread | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Marks/Chatter | <input type="checkbox"/> | Drill Holes | <input type="checkbox"/> | Off-set | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Turning Sequence | <input type="checkbox"/> | Finish | <input type="checkbox"/> | Out of Calibration | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Wave/Twist in Tube | <input type="checkbox"/> | Fit/Function | <input type="checkbox"/> | Out of Sequence | <input type="checkbox"/> | | <input type="checkbox"/> | |

Picklist Print

June-24-13 1:58:53 PM

Page 1

Work Order ID: 103590**Parent Item:** D3916-5**Parent Item Name:** Light Rib**Start Date:** 6/27/13**Required Date:** 7/05/13**Start Qty:** 6.00**Required Qty:** 6.00**Comments:** IPP RevA: new issue DD 09.11.23 verified by:EC
10.03.15 verified by:EC

IPP Rev:B as per dwg revA

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|-----------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|----------------------|---------------|----------------|--------|
| M304TS0.500W.049 Square Tubing | | Purchased | No | | | 100 | f | 1,723.6083 | 4.166 | 26.344559 25.0625 | | 24 13-0905 | |

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| WA006 | 1723.608273 | |
| 118460 | 0.00001534 | |
| 122938 | 0.266142 | |
| 123565 | 90.591216 | |
| 125062 | 564.509 | |
| 125502 | 408.2419 | |
| M126080 | 660 | 25.0625 |

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

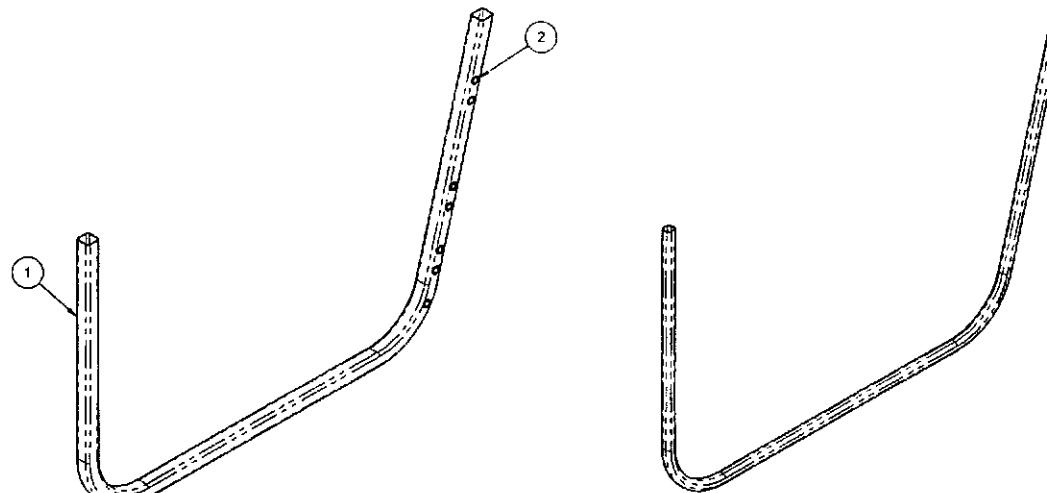
| | | | | | | | | | | |
|-------------------|----------------------|--------------------------|---------------|----------------------------|-----------|--------------------------|---------------------|--------------------------|-------------|--------------------------|
| Work Order: _____ | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | |
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| | Use-as-is | <input type="checkbox"/> | Thermoforming | <input type="checkbox"/> | Finishing | <input type="checkbox"/> | Rec/Store/Packaging | <input type="checkbox"/> | Other | <input type="checkbox"/> |
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|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design | | | | | | | | | |
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Handling/Pre | | | | | | | | | |
| Material | | | | | | | | | |
| Operator | | | | | | | | | |
| Offset/Setup | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Transport | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | | | | | | |
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| Cracks | Broken/Damage/Defect | <input type="checkbox"/> | Hardware | <input type="checkbox"/> | Part Incorrect | <input type="checkbox"/> | Temperature/Cure |
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| Heat Treat | Cut Too Short | <input type="checkbox"/> | Mislabeled | <input type="checkbox"/> | Power Loss/Surge | <input type="checkbox"/> | Other |
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| Marks/Chatter | Drill Holes | <input type="checkbox"/> | Off-set | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Turning Sequence | Finish | <input type="checkbox"/> | Out of Calibration | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Wave/Twist in Tube | Fit/Function | <input type="checkbox"/> | Out of Sequence | <input type="checkbox"/> | | <input type="checkbox"/> | |

| ITEM | QTY | P/N | DESCRIPTION |
|------|-------|-----------|-------------|
| | 0-041 | | RIB ASSY |
| 1 | 1 | D3916-041 | RIB |
| 2 | 7 | D3759-1 | BUSHING |



D3916-041 RIB ASSY

D3916-5 LIGHT RIB

SHEET 2 OF 4
 RELEASE DATE
 ENGINEER
UNCONTROLLED COPY
 SUBJECT TO CHANGE
 WORK ORDER
 NO. 103590 M/S

13-06-26

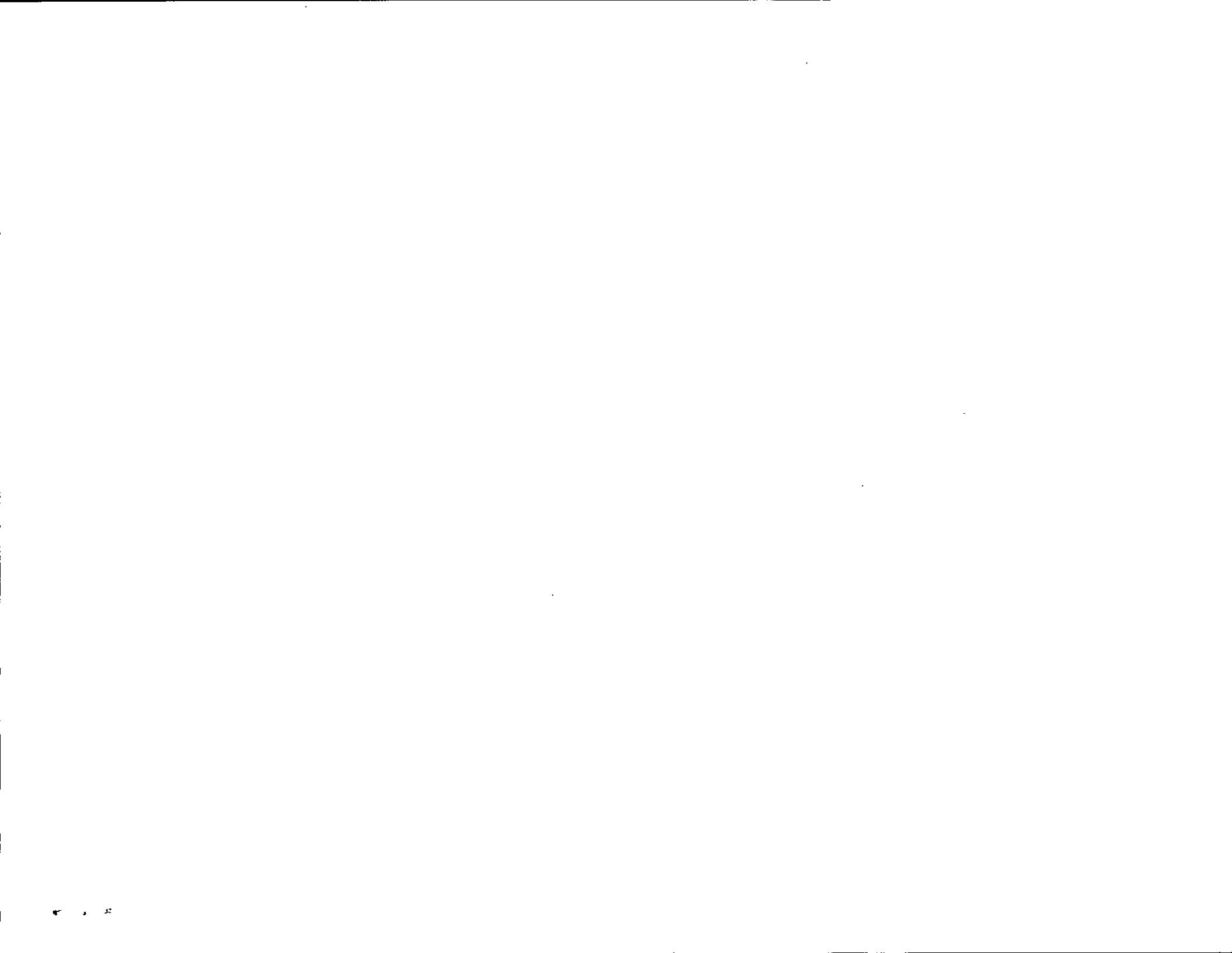
02-10-12-21
UNDER REVIEW
 10-03-04
 ADDITION OF HOLE & BUSHING
 ON D3916-041-1 RIBS.

RELEASED

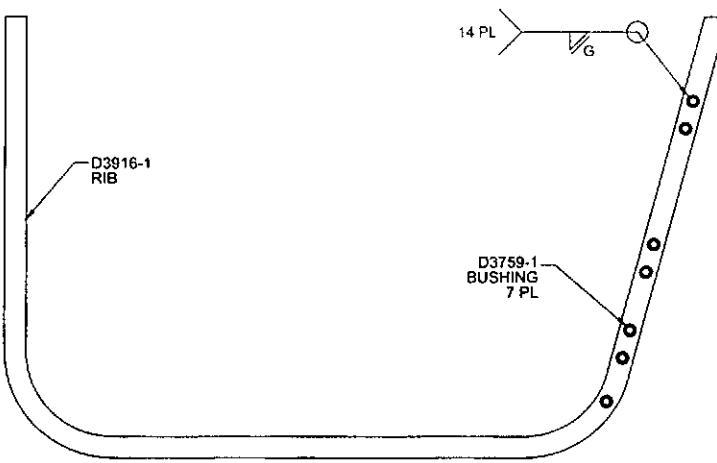
2010-03-12

MP

| A | NEW ISSUE | JPN | 10-03-04 |
|------------|-------------|--|--------------|
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | AJS | DART AEROSPACE LTD | |
| DRAWN | JPN | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | CC | DRAWING NO. | REV. A |
| MFG. APPR. | CC | D3916 | SHEET 1 OF 4 |
| APPROVED | MM | TITLE | SCALE |
| DE APPR. | MM | RIB ASSY, 350 BASKET | NTS |
| DATE | 10-03-04 | COPRIGHT © 2010 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. INFORMATION CONTAINED ON THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PURPOSE. DART AEROSPACE LTD. IS A TRADE NAME OF DART AEROSPACE LTD. Information is the exclusive property of DART AEROSPACE LTD. | |



103590

D3916-041 RIB ASSY

RELEASED
2010-03-12
AP

NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: NONE
 7) WEIGHT -041: 1.64 lbs
 8) WELD PER DART QSI 004

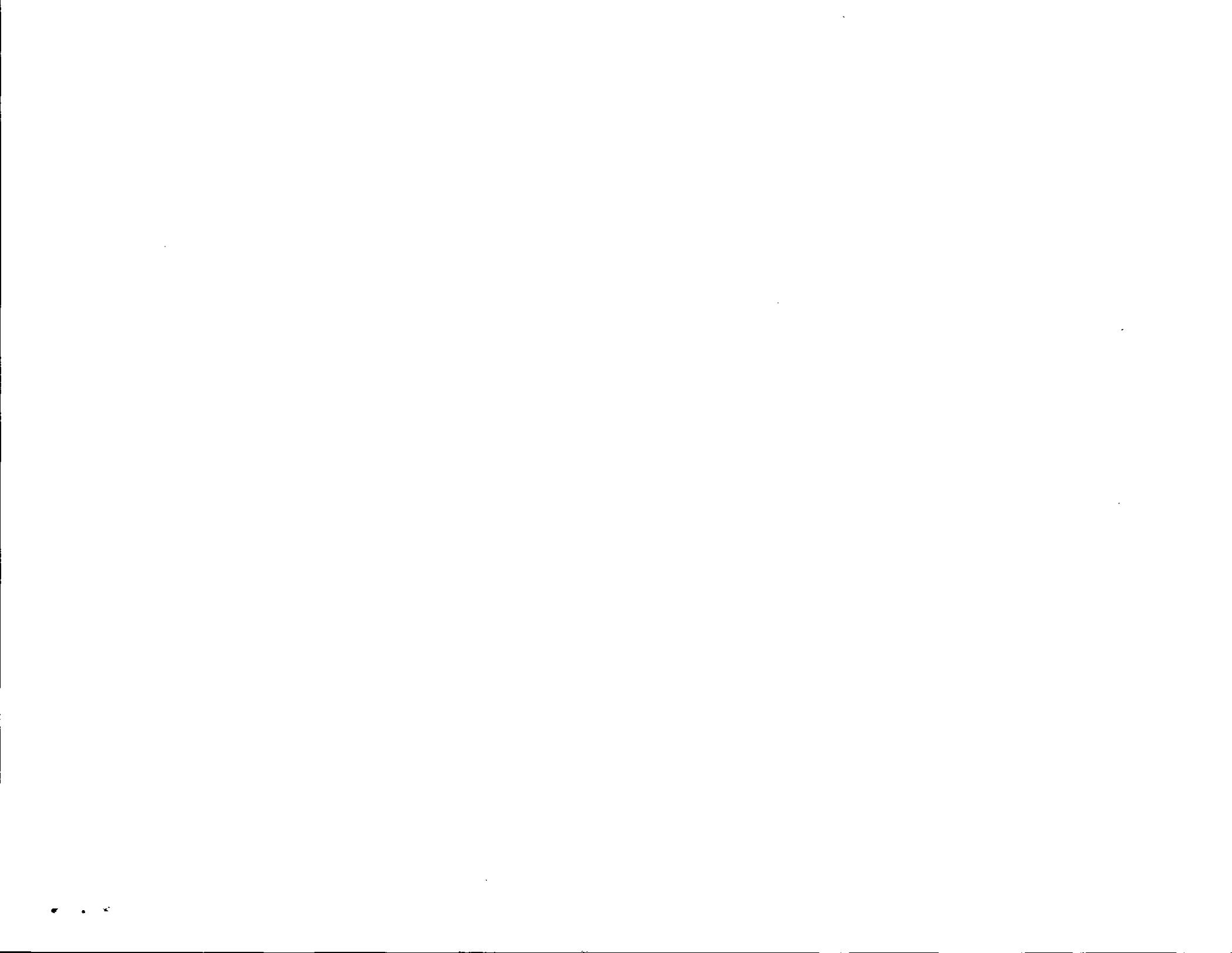
| | | | |
|------------|----------|-----------------------------|--|
| DESIGN | AJS | DART AEROSPACE LTD | |
| DRAWN | JPH | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | GD | DRAWING NO. | |
| MFG. APPR. | Z | REV. A | |
| APPROVED | AM | D3916 | |
| DE APPR. | # | SCALE | |
| DATE | 10.03.04 | RIB ASSY, 350 BASKET | |

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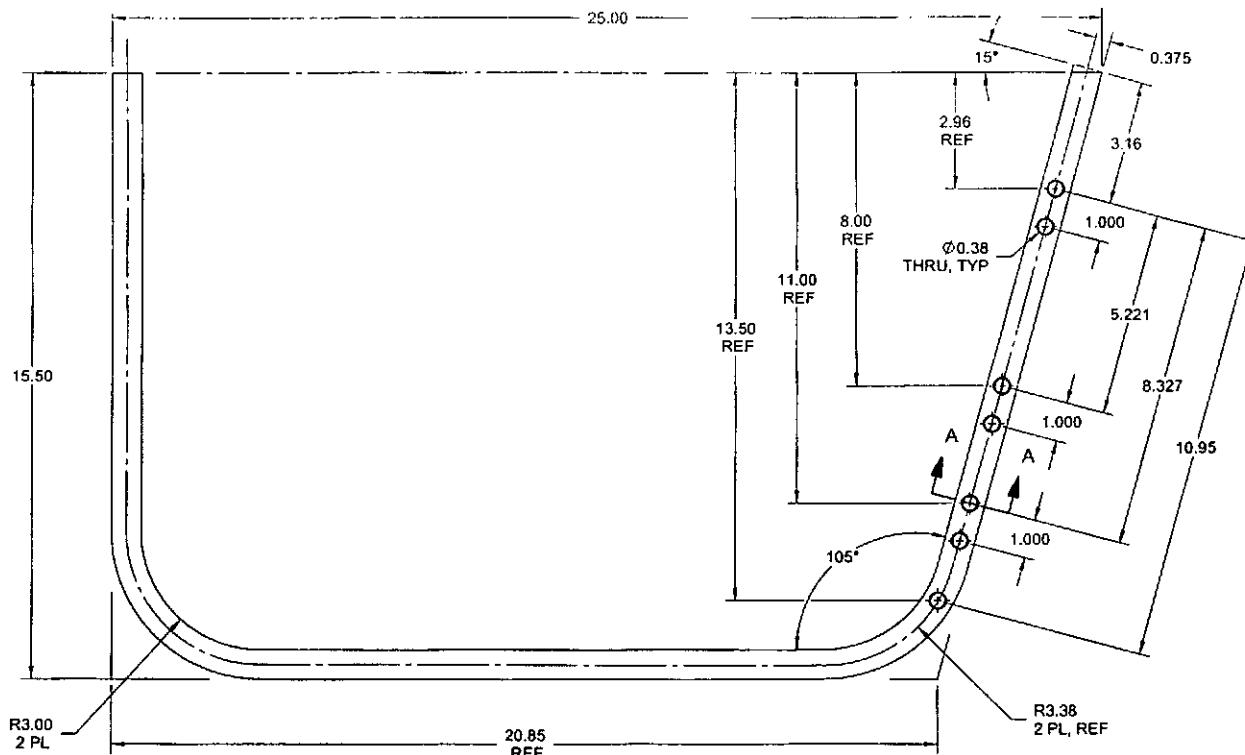
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103590



D3916-1 RIB

RELEASED
2010-03-12
NP

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
REF DART SPEC. M304TS0.750W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.76 lbs
- 8) TUBE FLAT LENGTH 50.0 REF

| | | |
|------------|-----------|---|
| DESIGN | AJS | DART AEROSPACE LTD |
| DRAWN | JPH | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | <i>BB</i> | DRAWING NO. REV. A |
| MFG. APPR. | <i>BB</i> | D3916 SHEET 3 OF 4 |
| APPROVED | <i>NV</i> | TITLE SCALE |
| DE APPR. | <i>NV</i> | RIB ASSY, 350 BASKET NTS |
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